

Energetická účinnost v programu Horizont 2020

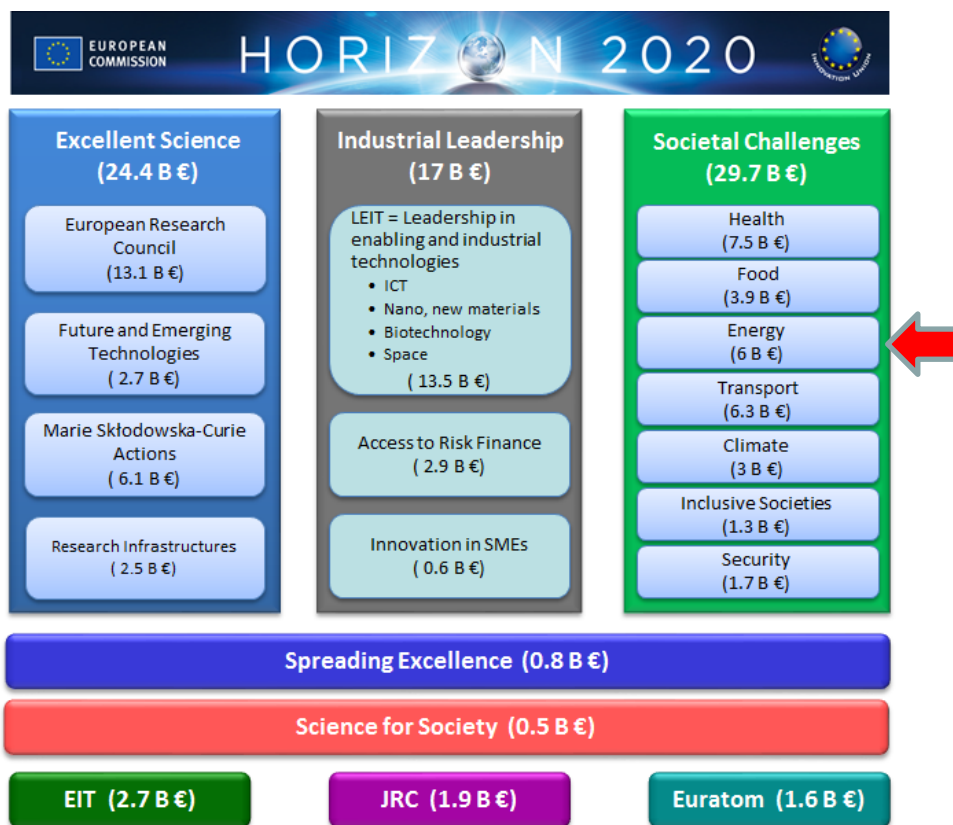
Ing. Veronika Korittová, NCP pro energii a EURATOM
25. 10. 2018

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Ve Struhách 27
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Program Horizont 2020 (zdroj - EK)



Public Private Partnerships

<http://ec.europa.eu/programmes/horizon2020/en/area/partnerships-industry-and-member-states>

- **JTIs – Joint Technology Initiatives** – Společné technologické iniciativy → Inovace do odvětví, která vytvářejí vysoce kvalitní pracovní místa (např. **FCH JU – Fuel Cells and Hydrogen, BBI – Bio-Based Industries**).
Mají právní subjektivitu.
Vyhlašují **vlastní výzvy**.
- **cPPPs – Contractual Partnerships with industry in research and Innovation** – smluvní partnerství - plně integrovány do H2020
V H2020 zaměření na 8 + 2 oblastí, hledané téma může být ve více částech pracovního programu – např. **EeB - Energy efficient Buildings, SPIRE - Sustainable Process Industry through Resource and Energy Efficiency**).

Pracovní program 2018 – 2020

část **ENERGY**, verze z 24. 7. 2018

- **Úvod** – politický kontext programu; odkazy na související dokumenty; cíle v oblasti energetiky
- **Výzva** – popis jednotlivých témat (topics):
 - Specific Challenge – řešený problém
 - Scope – rozsah (oblast vymezená pro řešení problému)
 - Expected Impact – čeho je třeba dosáhnout
 - Type of Action – typ projektu (RIA, IA, CSA atd. – má dopad na financování projektu)
- **Podmínky výzvy** – otevření výzvy, uzávěrky, finance pro jednotlivá témata; doplňující podmínky
- **Transformace energetického sektoru prostřednictvím digitalizace** – témata pod ICT a Security
- OTHER ACTIONS – např. tendry
- Témata pro rok 2020 – v přípravě, známy názvy témat

Pracovní program 2018 -2020

Zajištěná, čistá a účinná energie

Struktura pracovního programu – část ENERGY:

- **Energetická účinnost: EE 1 - EE 18**
- Vedoucí postavení v obnovitelných zdrojích energie: RES 1 – RES 30
- Chytrá a čistá energie pro spotřebitele: EC 1 – EC 3
- Chytrý energetický systém zaměřený na spotřebitele: ES 1 – ES 8
- Chytrá města a obce: SCC 1
- Dosažení téměř nulových emisí z elektráren na fosilní zdroje a z průmyslu s intenzivními emisemi CO₂: NZE 1 – NZE 6
- Společné akce: JA 1 – JA 5
- Průřezová témata: CC 1 – CC 6

Rozpočet ve výzvě ENERGY (údaje pro léta 2018 – 2019, na rok 2020 bude rozpočet upřesněn později); zdroj: EK

..



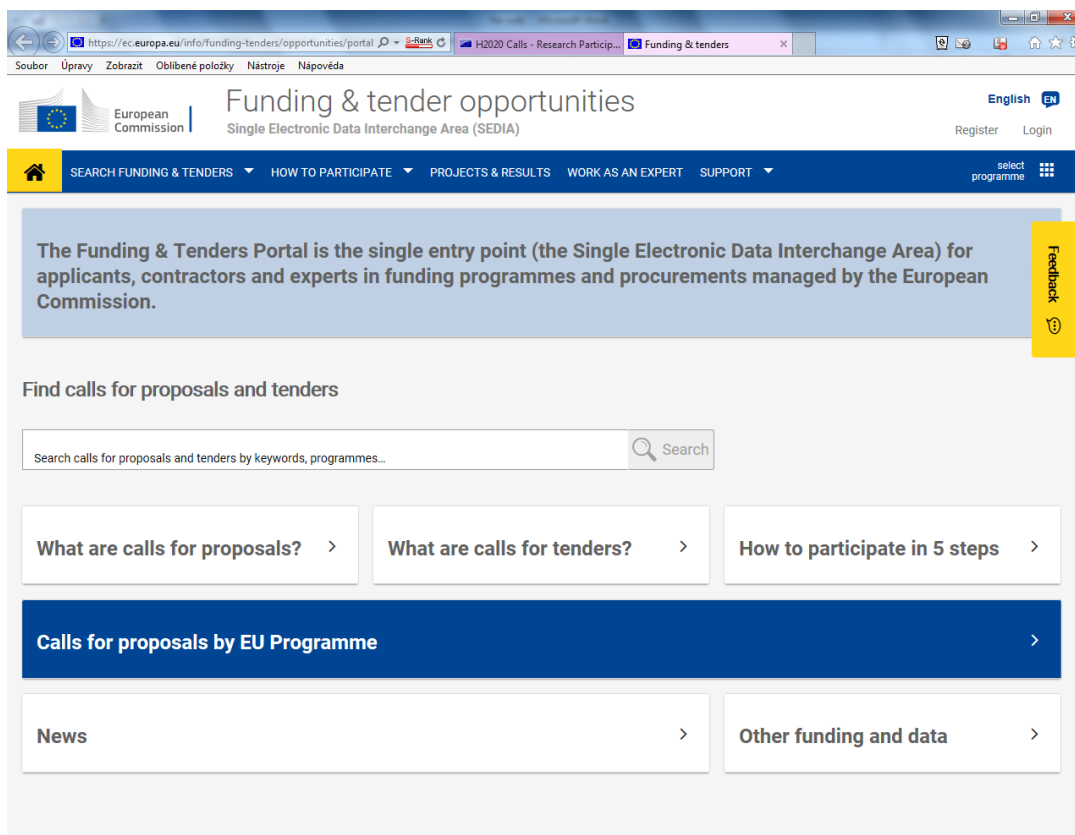
Technology Readiness Levels (= od nápadu k realizaci)

Jde o základní výzkum nebo aplikovaný výzkum?

- TRL 1 – basic principles observed
 - TRL 2 – technology concept formulated
 - TRL 3 – experimental proof of concept
 - TRL 4 – technology validated in lab
 - TRL 5 – technology validated in relevant environment (industrially relevant environment in the case of key enabling technologies)
 - **TRL 6** – technology demonstrated in relevant environment (industrially relevant environment in the case of key enabling technologies)
 - TRL 7 – system prototype demonstration in operational environment
 - TRL 8 – system complete and qualified
 - TRL 9 – actual system proven in operational environment (competitive manufacturing in the case of key enabling technologies; or in space)
-

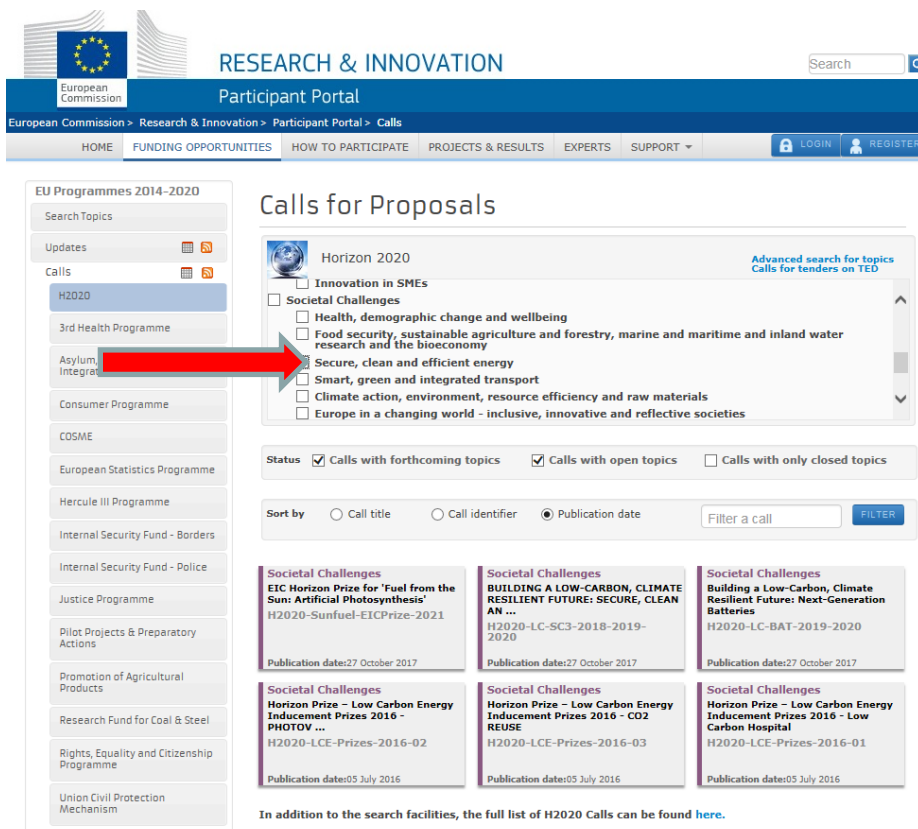
Nově: Funding and Tenders Portal

<https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/home>



Účastnický portál

Možnost filtrování – např. společenské výzvy



RESEARCH & INNOVATION
Participant Portal

European Commission > Research & Innovation > Participant Portal > Calls

HOME FUNDING OPPORTUNITIES HOW TO PARTICIPATE PROJECTS & RESULTS EXPERTS SUPPORT LOGIN REGISTER

EU Programmes 2014-2020

Search Topics

Updates

Calls

H2020

3rd Health Programme

Asylum Integration

Consumer Programme

COSME

European Statistics Programme

Hercule III Programme

Internal Security Fund - Borders

Internal Security Fund - Police

Justice Programme

Pilot Projects & Preparatory Actions

Promotion of Agricultural Products

Research Fund for Coal & Steel

Rights, Equality and Citizenship Programme

Union Civil Protection Mechanism

Calls for Proposals

Horizon 2020

[Advanced search for topics](#)
[Calls for tenders on TED](#)

☐ Innovation in SMEs

☐ Societal Challenges

☐ Health, demographic change and wellbeing

☐ Food security, sustainable agriculture and forestry, marine and maritime and inland water research and the bioeconomy

☐ Secure, clean and efficient energy

☐ Smart, green and integrated transport

☐ Climate action, environment, resource efficiency and raw materials

☐ Europe in a changing world - inclusive, innovative and reflective societies

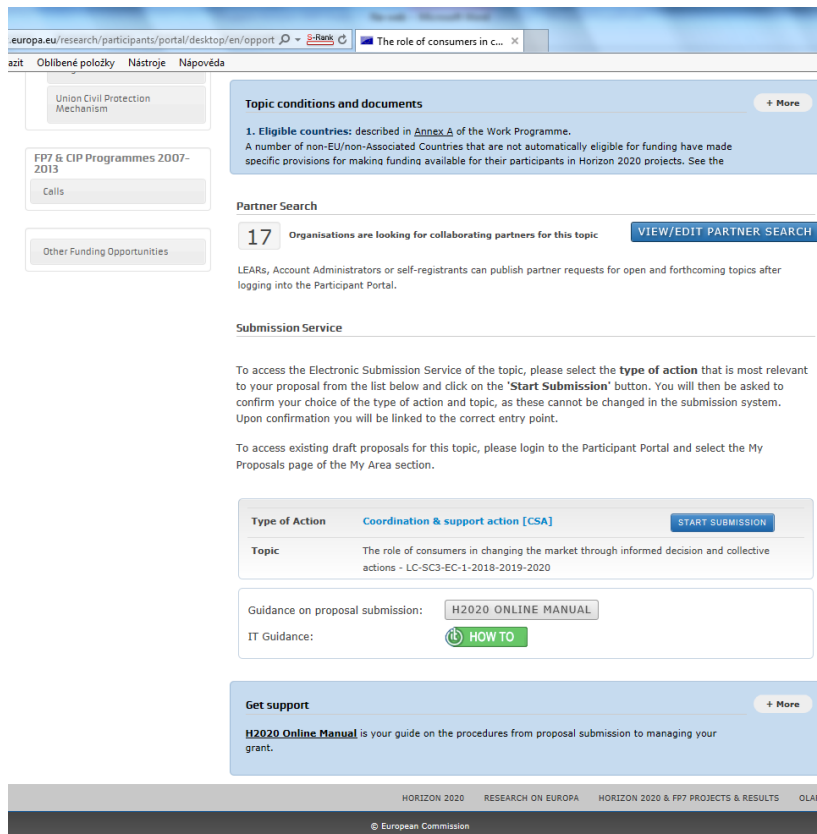
Status ☒ Calls with forthcoming topics ☒ Calls with open topics ☐ Calls with only closed topics

Sort by ☐ Call title ☐ Call identifier ☒ Publication date

Societal Challenges EIC Horizon Prize for 'Fuel from the Sun: Artificial Photosynthesis' H2020-Sunfuel-EICPrize-2021 Publication date: 27 October 2017	Societal Challenges BUILDING A LOW-CARBON, CLIMATE RESILIENT FUTURE: SECURE, CLEAN AN ... H2020-LC-SC3-2018-2019-2020 Publication date: 27 October 2017	Societal Challenges Building a Low-Carbon, Climate Resilient Future: Next-Generation Batteries H2020-LC-BAT-2019-2020 Publication date: 27 October 2017
Societal Challenges Horizon Prize - Low Carbon Energy Inducement Prizes 2016 - PHOTOV ... H2020-LCE-Prizes-2016-02 Publication date: 05 July 2016	Societal Challenges Horizon Prize - Low Carbon Energy Inducement Prizes 2016 - CO2 REUSE H2020-LCE-Prizes-2016-03 Publication date: 05 July 2016	Societal Challenges Horizon Prize - Low Carbon Energy Inducement Prizes 2016 - Low Carbon Hospital H2020-LCE-Prizes-2016-01 Publication date: 05 July 2016

In addition to the search facilities, the full list of H2020 Calls can be found [here](#).

Možnost hledání partnerů do projektu prostřednictvím Účastnického portálu (view/edit partner search)



The screenshot shows the 'The role of consumers in c...' topic page on the Participant Portal. A red arrow points to the 'VIEW/EDIT PARTNER SEARCH' button in the 'Partner Search' section.

Topic conditions and documents + More

1. **Eligible countries:** described in Annex A of the Work Programme. A number of non-EU/non-Associated Countries that are not automatically eligible for funding have made specific provisions for making funding available for their participants in Horizon 2020 projects. See the

Partner Search

17 Organisations are looking for collaborating partners for this topic **VIEW/EDIT PARTNER SEARCH**

LEARs, Account Administrators or self-registrants can publish partner requests for open and forthcoming topics after logging into the Participant Portal.

Submission Service

To access the Electronic Submission Service of the topic, please select the **type of action** that is most relevant to your proposal from the list below and click on the **'Start Submission'** button. You will then be asked to confirm your choice of the type of action and topic, as these cannot be changed in the submission system. Upon confirmation you will be linked to the correct entry point.

To access existing draft proposals for this topic, please login to the Participant Portal and select the My Proposals page of the My Area section.

Type of Action **Coordination & support action [CSA]** **START SUBMISSION**

Topic The role of consumers in changing the market through informed decision and collective actions - LC-SC3-EC-1-2018-2019-2020

Guidance on proposal submission: **H2020 ONLINE MANUAL**

IT Guidance: **HOW TO**

Get support + More

H2020 Online Manual is your guide on the procedures from proposal submission to managing your grant.

HORIZON 2020 RESEARCH ON EUROPA HORIZON 2020 & FP7 PROJECTS & RESULTS OLAF

© European Commission

Energetická účinnost: LCE-SC3-EE (1)

Oblast	Typ akce	Uzávěrka	TRL	Dopor. přísp. EK na projekt/ celkem na téma
<u>Zlepšování energetické účinnosti a inteligence budov</u>				
EE 1 – Decarbonising of the EU building stock: innovative approaches and affordable solutions changing the market for building renovations (EeB)	IA	<u>3/9/2019;</u> 2020	To 8-9	3 – 4 mil. € /12 mil. €
EE 2 – Integrated home renovation services	CSA	<u>3/9/2019</u>		0,5–1,5 mil. € /10 mil. €
EE 3 – Stimulating demand for sustainable energy skills in the construction sector	CSA	<u>3/9/2019;</u> 2020		0,5–1 mil. €/ 6 mil. €
EE 4 - Upgrading smartness of existing buildings through innovations for legacy equipment (EeB)	IA	<u>3/9/2019;</u> 2020	6 - 8	3 – 4 mil. € /10 mil. €
EE 5 - Next-generation of Energy Performance Assessment and Certification (EeB)	IA 2019	<u>3/9/2019;</u> 2020		2 –2,5 mil. € /10 mil. €
<u>Energeticky účinný průmysl a služby</u>				
EE 6 – Business case for industrial waste heat/cold recovery (SPIRE)	CSA 2019	<u>3/9/2019;</u> 2020		1 – 2 mil. € / 6 mil. €

Energetická účinnost: LCE-SC3-EE (2)

Oblast	Typ akce	Uzávěrka	TRL	Dopor. přísp. EK na projekt /celkem na téma
EE 7 – Increasing energy efficiency of small data centres		2020		
EE 8 – Capacity building programmes to support implementation of energy audits	CSA	<u>3/9/2019</u>		1 – 2 mil. € /5 mil. €
<u>Energetická účinnost jako investice</u>				
EE 9 – Innovative financing for energy efficiency investments	CSA	<u>3/9/2019</u>		1 – 1,5 mil. € / 4 mil. €
EE 10 - Mainstreaming energy efficiency finance	CSA	<u>3/9/2019;</u> 2020		1–1,5 mil. € / 6 mil. €
EE 11 - Aggregation - Project Development Assistance	CSA	<u>3/9/2019;</u> 2020		0,5–1,5 mil. € /6 mil. €
EE 12 - Innovation procurement for energy efficiency		2020		
<u>Energetická účinnost jako zdroj energie</u>				
EE 13 – Enabling next-generation of smart energy services valorising energy efficiency and flexibility at demand-side as energy resource	IA 2019	<u>3/9/2019;</u> 2020		3 – 4 mil. € / 8 mil. €

Energetická účinnost: LCE-SC3-EE (3)

Oblast	Typ akce	Uzávěrka	TRL	Dopor. přísp. EK na projekt /celkem na téma
EE 14 – Socio-economic research conceptualising and modelling energy efficiency and energy demand (SSH)	RIA	<u>3/9/2019;</u> 2020		1 – 2 mil. €/ 4 mil. €
<u>Podpora inovacím vycházejících z politik</u>				
EE 15 – pouze 2018	CSA			
EE 16 - Supporting public authorities to implement the Energy Union	CSA	<u>3/9/2019;</u> 2020		1– 1,5 mil. € /10 mil. €
EE 17 - European City facility - European Cities as key innovation hubs to unlock finance for energy efficiency	CSA	<u>5/2/2019</u>		16 mil. €/ 16 mil. €
EE 18 – Bioclimatic approaches for improving energy performance in buildings in Africa and Europe	CSA	3/9/2019		1 mil. € / 1 mil. €

Baterie (1): průřezové aktivity společenských výzev energie a doprava

Oblast	Typ akce	Uzávěrka	TRL	Dopor. přísp. EK na projekt/ celkem na téma
<u>Baterie nové generace, LC-BAT-2019-2020</u>				
BAT 1 – Strongly improved, highly performant and safe all solid state batteries for electric vehicles	RIA	<u>25/4/2019</u>	3 to 6	6 – 8 mil. €
BAT 2 – Strengthening EU materials technologies for non-automotive battery storage	RIA	<u>25/4/2019</u>	4 to 6	6 – 8 mil. €
BAT 3 – Modelling and simulation for Redox Flow Battery development	RIA	<u>25/4/2019</u>		up to 2 mil. €
BAT 4 – Advanced Redox Flow Batteries for stationary energy storage	RIA	<u>25/4/2019</u>	3 to 5	3 – 4 mil. €
BAT 5 – Research and innovation for advanced Li-ion cells (generation 3b – see SET Plan action 7)	RIA	<u>25/4/2019</u>	to 5-6	5 – 12 mil. €
BAT 6 – Li-ion Cell Materials & transport Modelling	RIA	<u>25/4/2019</u>	to at least 5	3 – 6 mil. €
BAT 7 – Network of Li-ion cell pilot lines	CSA	<u>25/4/2019</u>		1 – 2 mil. €

Baterie (2): průřezové aktivity společenských výzev energie a doprava

Oblast	Typ akce	Uzávěrka	TRL	Dopor. přísp. EK na projekt/ celkem na téma
<u>Témata pro rok 2020</u>				
BAT 8 – Next generation batteries for stationary energy storage		2020		
BAT 9 – Hybridisation of battery systems for stationary energy storage		2020		
BAT 10 – Next generation and realisation of battery packs for BEV and HEV		2020		

Doplňující podmínky – v pracovním programu za přehledem uzávěrek

- **CSA:** v Obecných dodatcích (General Annexes) požadavek alespoň **jednoho** subjektu z členských zemí EU nebo zemí asociovaných k H2020 x v pracovním programu ENERGY požadavek u některých CSA témat na minimálně tři účastníky ze tří různých zemí (v energetické účinnosti témata EE-3-2019-2020; EE-5-2018-2019-2020; EE-6-2018-2019-2020; EE-8-2018-2019; EE-9-2018-2019; EE-10-2018-2019-2020; EE-13-2018-2019-2020; EE-16-2018-2019-2020)
- spolupráce s Afrikou: EE-18-2019
- Práh minimální hranice hodnocení inovačních akcí u excellence a dopadu je 4: EE-1-2018-2019-2020; EE-6-2018-2019-2020

Hodnocení projektů - Obecné dodatky

WP: H. Hodnocení.

Nezávislí experti hodnotí návrhy projektů na základě **tří kritérií** (více v General Annexes):

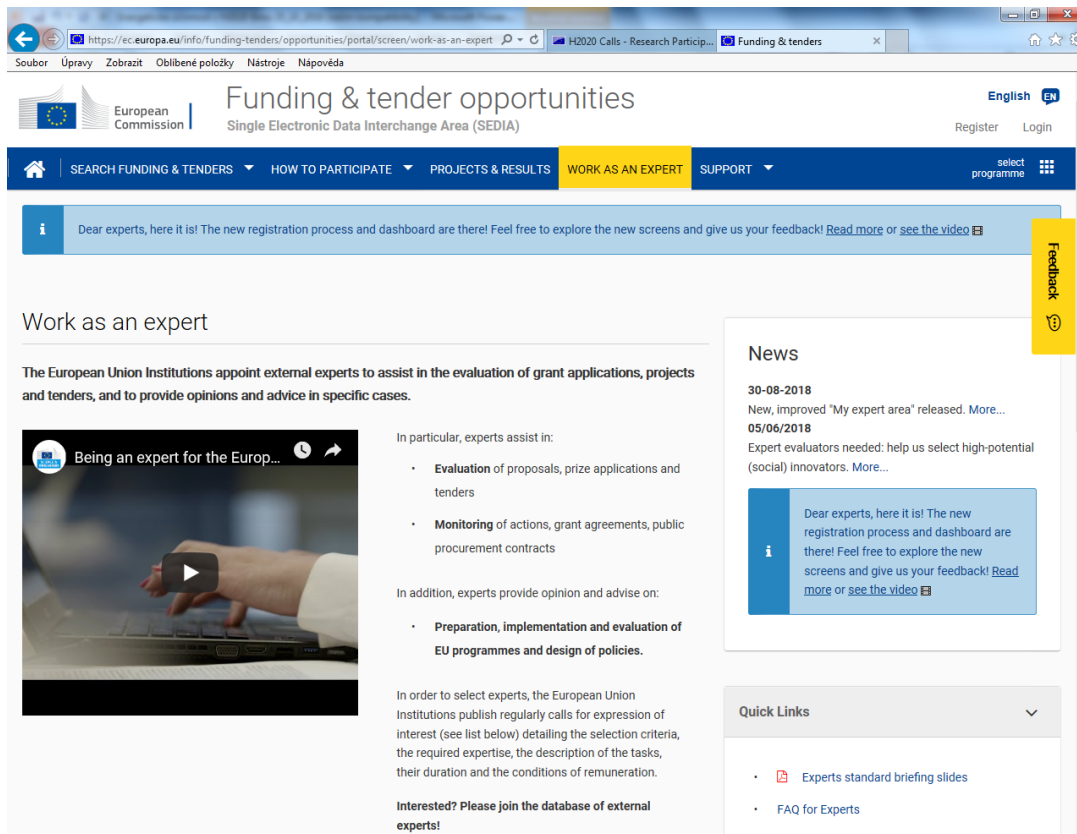
- Kvalita vědecká a/nebo technologická (**Excellence**)
- Dopad (**Impact**)
- Implementace (**Quality and efficiency of the implementation**)

Aspekty, které je třeba brát v úvahu, závisejí na typu akce. Požadavky mohou být dále upřesněny v jednotlivých výzvách. Stupnice od 1 do 5, prahová hodnota pro jednotlivá kritéria i pro součet.

- ☐ **Finanční kapacita** (on-line nástroj, který umožňuje koordinátorovi projektu sebehodnocení)
- ☐ **Operační kapacita** (kompetence a zkušenosti jednotlivých účastníků)
- ☐ **Technology Readiness Level**

Hodnotitelé projektů – možnost registrace

<https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/work-as-an-expert>



The screenshot shows the 'Work as an expert' page on the European Commission's Funding & tender opportunities portal. The page is titled 'Work as an expert' and includes a video player with the title 'Being an expert for the Europ...'. The text describes the role of external experts in evaluating grant applications and projects. It lists the tasks of experts, including evaluation of proposals, monitoring of actions, and preparation, implementation and evaluation of EU programmes and design of policies. The page also includes a 'News' section with dates 30-08-2018 and 05/06/2018, and a 'Quick Links' section with links to 'Experts standard briefing slides' and 'FAQ for Experts'.

Work as an expert

The European Union Institutions appoint external experts to assist in the evaluation of grant applications, projects and tenders, and to provide opinions and advice in specific cases.

In particular, experts assist in:

- **Evaluation** of proposals, prize applications and tenders
- **Monitoring** of actions, grant agreements, public procurement contracts

In addition, experts provide opinion and advise on:

- **Preparation, implementation and evaluation** of EU programmes and design of policies.

In order to select experts, the European Union Institutions publish regularly calls for expression of interest (see list below) detailing the selection criteria, the required expertise, the description of the tasks, their duration and the conditions of remuneration.

Interested? Please join the database of external experts!

News

30-08-2018
New, improved "My expert area" released. [More...](#)

05/06/2018
Expert evaluators needed: help us select high-potential (social) Innovators. [More...](#)

Quick Links

- [Experts standard briefing slides](#)
- [FAQ for Experts](#)

Specializovaný nástroj Partner Search ENERGY + EURATOM

<http://www.partnersearch.c-energy2020.eu/>



The screenshot shows the homepage of the C-Energy2020 Partner Search tool. The header includes the C-Energy2020 logo and navigation links: HOME, ABOUT, GET NEWSLETTER, INTRANET, and CONTACTS. A yellow banner features icons for various services: Find your NCP, EU funding, Partner Search, EU networks, News & EU Policy, Calendar, and Media. Below the banner, the 'partner search' section is highlighted. On the left, there is a 'Login' section with fields for Username (E-Mail address) and Password, and a 'LOGIN' button. Below the login section are links for 'Registration', 'Password lost?', and 'Navigation'. The 'Navigation' section includes links for 'Partner Search Home', 'Search for Partner Entries', and 'Search for Partner Profiles'. The main content area features the title 'HORIZON 2020 - WORK PROGRAMMES - Part 10. Secure, clean and efficient energy & Euratom' and a section titled 'Dedicated Partner Search tool'. This section describes the tool's purpose and provides links to download the H2020 Energy 2016-2017 workprogramme (1.67MB Pdf document) and the Euratom 2016-2017 workprogramme (1MB Pdf document). The 'Entry options' section explains that the tool is used to discern between researchers who offer their expertise and those who want to collaborate in project consortia.

- Hledání partnerů pro projekty
- Je třeba validace od NCP

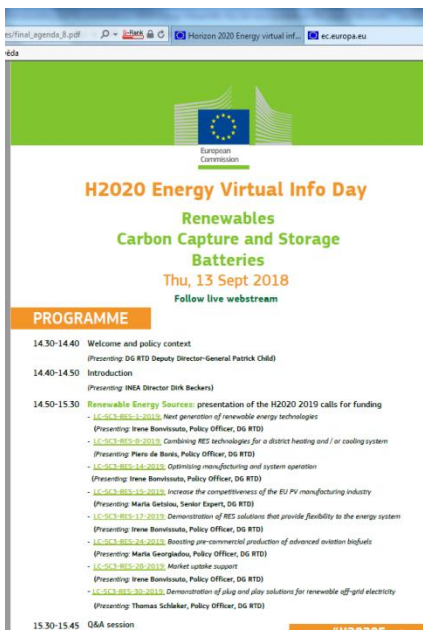
Informační dny Evropské komise

• Virtuální Info den 13. 9. 2018

<https://ec.europa.eu/inea/en/news-events/events/horizon-2020-energy-virtual-info-day>

• Info den 5. 10. 2018

<https://ec.europa.eu/inea/en/news-events/events/horizon-2020-energy-info-day>



Agenda_H2020Energy... Horizon 2020 Energy virtual info... ec.europa.eu

Agenda

H2020 Energy Virtual Info Day
Renewables
Carbon Capture and Storage
Batteries
Thu, 13 Sept 2018
Follow live webstream

PROGRAMME

14.30-14.40 Welcome and policy context
(Presenting DG RTD Deputy Director-General Patrick Chidi)

14.40-14.50 Introduction
(Presenting INEA Director Dirk Beckers)

14.50-15.30 **Renewable Energy Sources:** presentation of the H2020 2019 calls for funding
- [LC-SCT-SES-1-2019](#): Next generation of renewable energy technologies
(Presenting Irene Bonvisuto, Policy Officer, DG RTD)
- [LC-SCT-SES-8-2019](#): Combining RES technologies for a district heating and / or cooling system
(Presenting Piero de Bonis, Policy Officer, DG RTD)
- [LC-SCT-SES-14-2019](#): Optimizing manufacturing and system operation
(Presenting Irene Bonvisuto, Policy Officer, DG RTD)
- [LC-SCT-SES-15-2019](#): Increase the competitiveness of the EU PV manufacturing industry
(Presenting Maria Gertziou, Senior Expert, DG RTD)
- [LC-SCT-SES-17-2019](#): Demonstration of RES solutions that provide flexibility to the energy system
(Presenting Irene Bonvisuto, Policy Officer, DG RTD)
- [LC-SCT-SES-24-2019](#): Boosting pre-commercial production of advanced aviation biofuels
(Presenting Maria Georgiadou, Policy Officer, DG RTD)
- [LC-SCT-SES-28-2019](#): Market uptake support
(Presenting Irene Bonvisuto, Policy Officer, DG RTD)
- [LC-SCT-SES-30-2019](#): Demonstration of plug and play solutions for renewable off-grid electricity
(Presenting Thomas Schläpfer, Policy Officer, DG RTD)

15.30-15.45 Q&A session



Agenda_H2020Energy... Společenské výpr... Horizon 2020 Ener... Horizon 2020 Ener...

Agenda

**Horizon 2020
Energy Info Day**
#H2020Energy

5 October 2018
Charlemagne building
Rue de la Loi 170, 1000 Brussels

PROGRAMME

08.30-09.30 Registration and welcome coffee
Please arrive early to avoid long queues and secure a seat in the main room

09.30-09.45 Welcome and introduction

09.45-10.00 Energy systems - policy context

10.00-11.00 Presentation of the 2019 H2020 Energy System calls:
- Flexibility and retail market options for the distribution grid: [LC-SCT-ES-1-2019](#)
- Solutions for regional cooperation in the transmission grid: [LC-SCT-ES-2-2019](#)
- Research on advanced tools and technological development: [LC-SCT-ES-6-2019](#)
- European Islands Facility: [LC-SCT-ES-8-2019](#)
- Big data solution for energy call: [01-SC1-11-2019](#)

11.00-11.15 Experience of a successful Energy System project

11.15-11.45 Q&A session

11.45-12.00 Key steps of evaluation process

12.00-12.15 What evaluators are looking for - a recap from previous evaluations

12.15-12.30 Q&A session

12.30-14.00 Lunch break

14.00-14.15 Smart Cities and Communities - policy context

14.15-14.45 Presentation of the 2019 Smart Cities and Communities call:
[LC-SCT-SC1-1-2019-2020-2020](#)

14.45-15.00 Experience of a successful Smart Cities and Communities project

15.00-15.30 Q&A session

Portál CORDIS – zdroj informací o financovaných projektech RP

cordis.europa.eu



The screenshot shows the CORDIS website interface. At the top, there is a navigation bar with links: About CORDIS | Contact | Advanced Search | Legal Notice | English (en). Below this is the CORDIS logo and the text "Community Research and Development Information Service". A breadcrumb trail reads "European Commission > CORDIS > Home". A horizontal menu contains several buttons: Home, News and Events, Programmes, Projects and Results (highlighted with a red box), Top Stories, research*eu magazines, Research Partners, and National and Regional. A search bar is located on the right of this menu.

The main content area is divided into several sections:

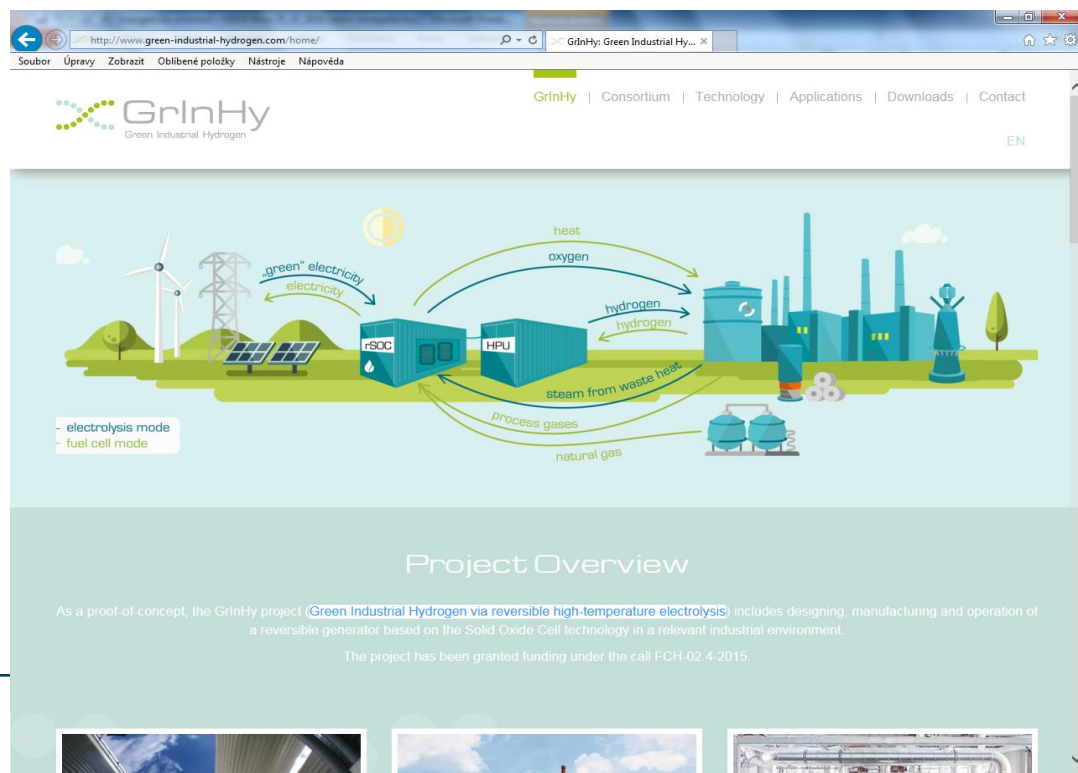
- Tweets from FP7 projects:** A vertical list of tweets from EpiGeneSys.eu and MIRRI.
- CORDIS is the European Commission's primary public repository and portal to disseminate information on all EU-funded research projects and their results in the broadest sense.**
- Research Funding:** A section with links to "Calls and funding opportunities", "Horizon 2020 | 7th Framework Programme", and "Practical guide for EU funding".
- News & Events:** A section with two featured articles:
 - Trending science: The super harvest moon** - Did you catch the bright milky moon lighting up the sky earlier this week? This wasn't just a beautiful harvest moon, it was actually a super harvest moon!
 - Cutting congestion on the data network highway** - The EU-funded MIWAVES project aims to ease data congestion on Europe's crowded mobile phone network by exploring – and exploiting – new radio technologies.
- Other EU Websites:** A list of links including Participant Portal, Research on Europa, European Research Council, Marie Curie Actions, and Horizon 2020.

On the right side, there is a "Sign in" button and a "Do not miss" section featuring a "research*eu" magazine cover with the headline "BACTERIA: SMALL ORGANISMS, BIG IMPACT". Below the magazine is a "Special feature" link: "Bacteria: Small organisms, big impact".

Projekt GrInHy

<http://www.green-industrial-hydrogen.com/home/>

- FCH JU – H2020-JTI-FCH-2015; Green Industrial Hydrogen via reversible high-temperature electrolysis
- Ústav fyziky materiálů AV ČR



- Smart Cities and Communities: SCC-01-2016
- Vysoké učení technické v Brně
- Statutární město Brno



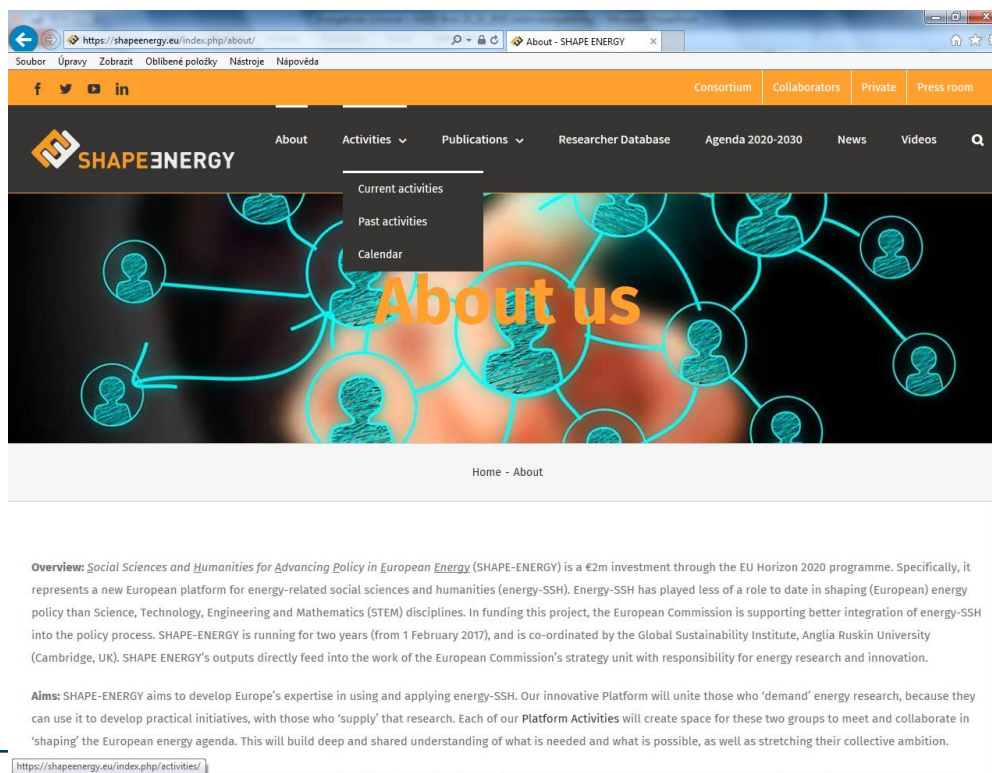
- H2020-LCE-21-2015: Modelling and analysing the energy system
- Masarykova univerzita Brno
- Hnutí DUHA – Friends of the Earth



Příklad financovaného projektu: SHAPE-ENERGY

<https://shapeenergy.eu/>

- H2020-LCE-32-2016: European platform for energy related SSH
- Univerzita Tomáše Bati ve Zlíně



Cordis>Results Packs> Old meets green: New technologies to retrofit buildings in Europe

cordis.europa.eu/article/id/400003-retrofitting-buildings... Old meets green: New tech...

Obíbené položky Nástroje Nápvěda

[Toolkit to offer efficient and cost-effective building retrofitting](#)

2017-03-07



A modular retrofitting toolkit will facilitate effective decision making, increase Europe's energy efficient building stock and benefit residents.

[Renovation database to boost energy efficiency across the EU](#)

2017-03-07



An online database for the renovation of different building types – complete with specific tools – will boost energy efficiency and benefit builders.

[Tackling the complexity of retrofitting urban districts](#)

2015-12-11



Retrofitting entire districts with energy efficient products and techniques is a sustainable and cost-effective approach to reducing heat loss and cutting fuel use, especially in...

[Retrofitting the easy way thanks to new set of ICT tools](#)

2015-12-11



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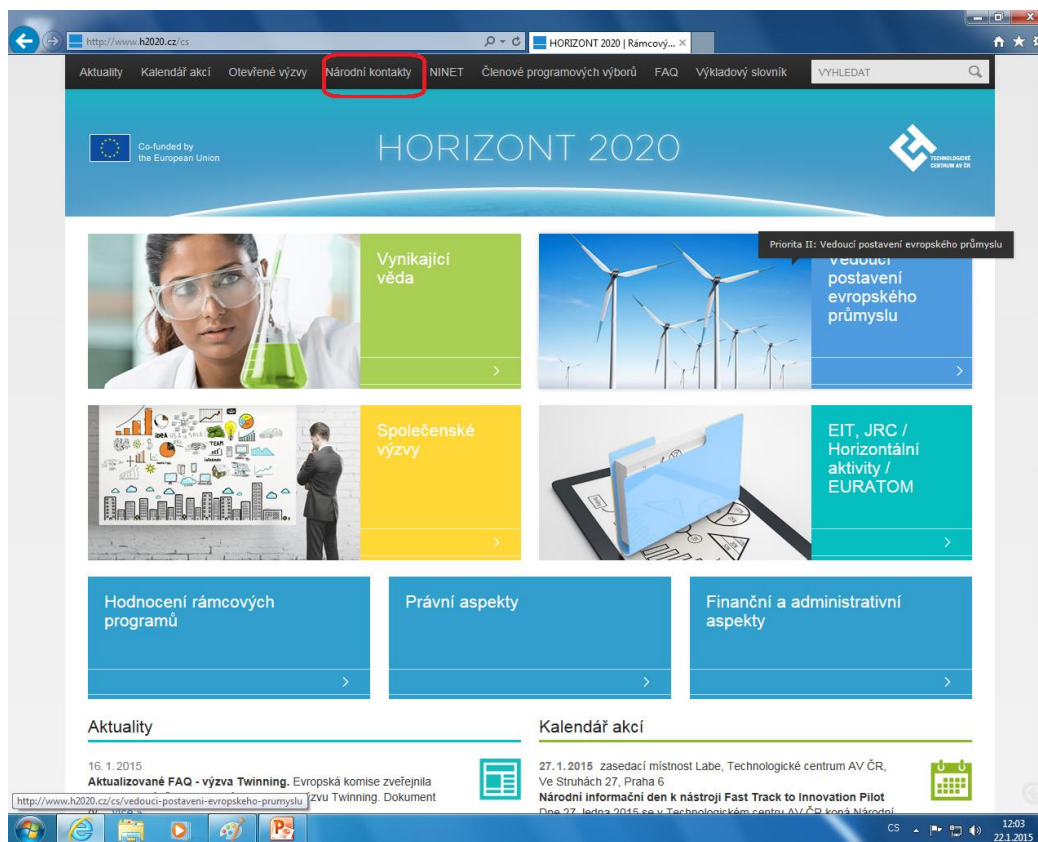


- Přední národní pracoviště pro podporu mezinárodní výzkumné a vývojové spolupráce v celém Evropském výzkumném prostoru
- Informace pro výzkum a vývoj – **Národní informační centrum pro evropský výzkum** (NICER)
- Strategické studie a projekty
- Podpora podnikání, inovace a transfer technologií
- Kancelář CZELO v Bruselu

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Možnost odběru novinek – po zaregistrování; Publikace



Zdroje informací

- **CORDIS:** <http://cordis.europa.eu/>
- **TC:** <http://www.tc.cz/>
<http://www.h2020.cz/>
- **CZELO:** www.czelo.cz
- **Participant Portal:**
<http://ec.europa.eu/research/participants/portal/desktop/en/home.html>
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